

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD1601	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 1601 Twitchell	A	2.47						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Erosion / Bank Caving	0.01		0.01	0.41%				
<i>Supplemental</i>								
DWR UCIP Field Study					0.18			
<i>LMA Totals:</i>	0.01	0.00	0.01	0.41%	0.18	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2013 Levee Inspection Results

Reclamation District No. 1601 Twitchell

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Reclamation District No. 1601 Twitchell

Waterway			Bank	Unit Miles
Unit No. 01 Threemile Slough			Left	2.47
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	03/14/2013 - 03/14/2013		09/12/2013 - 09/12/2013	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By				

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Threemile Slough				Left	2.47	09/12/2013 09/12/2013	Richard Willoughby	

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	0.00	0.00	Earthen Levee	Operations & Maintenance Manuals	CR	A Ma		°	°	6
DWR ID: DWR_RD1601_01_s_2013_6										
2	0.00	0.00	Earthen Levee	Emergency Supplies & Equipment	CR	A Ma		°	°	7
DWR ID: DWR_RD1601_01_s_2013_7										
3	0.00	0.00	Earthen Levee	Flood Preparedness & Training	CR	A Ma		°	°	8
DWR ID: DWR_RD1601_01_s_2013_8										
4	0.10	2.47	Earthen Levee	Crown Surface / Depressions / Rutting	CR	A Ma	C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.	38.120883 ° -121.682775 °	38.104085 ° -121.683898 °	5 Y
DWR ID: DWR_RD1601_01_s_2012_5										
5	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19543 EP_NO: 11227 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears this crossing might be been recently modified--exposed section of pipe is protected with white paint. Need to contact owner to obtain records. Recommend clearing vegetation along the pipe alignment. FIELD_STRUCT_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Siphon primer on waterward shoulder. 36-inch steel pipe with shut-off valve inside at landward toe ditch. (ABO No. 11227-1975) FS Date: 05/14/2013	38.120716 ° -121.682796 °	38.120716 ° -121.682796 °	1
DWR ID: DWR_RD1601_01_f_2013_1										
6	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19526 EP_NO: 11227 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Siphon primer on waterward shoulder. 36-inch steel pipe with shut-off valve inside at landward toe ditch. (ABO No. 11227-1975) FS Date: 05/14/2013	38.120716 ° -121.682796 °	38.120716 ° -121.682796 °	2 Y
DWR ID: DWR_RD1601_01_f_2013_2										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	

7	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19504 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 14-inch siphon through the levee approximately 3.2 feet below the crown. The existing 8-inch pipe listed in the O&M manual is no longer present at LM 0.1 (USACE-1959), no permit was found authorizing crossing modifications. FS Date: 05/14/2013	38.120699 ° -121.682700 °	38.120699 ° -121.682700 °	9
---	------	------	--------------	-------------------------	----	---------	---	------------------------------	------------------------------	---

DWR ID: DWR_RD1601_01_f_2013_9

8	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19505 EP_NO: 11227 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Siphon primer on waterward shoulder. 36-inch steel pipe with shut-off valve inside at landward toe ditch. (ABO No. 11227-1975) FS Date: 05/14/2013	38.120707 ° -121.682698 °	38.120707 ° -121.682698 °	10
---	------	------	--------------	-------------------------	----	---------	--	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_10

9	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19506 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 14-inch siphon through the levee approximately 3.2 feet below the crown. The existing 8-inch pipe listed in the O&M manual is no longer present at LM 0.1 (USACE-1959), no permit was found authorizing crossing modifications. FS Date: 05/14/2013	38.120699 ° -121.682700 °	38.120699 ° -121.682700 °	11
---	------	------	--------------	-------------------------	----	---------	---	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_11

10	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19503 EP_NO: 11227 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Siphon primer on waterward shoulder. 36-inch steel pipe with shut-off valve inside at landward toe ditch. (ABO No. 11227-1975) FS Date: 05/14/2013	38.120707 ° -121.682698 °	38.120707 ° -121.682698 °	12
----	------	------	--------------	-------------------------	----	---------	--	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_12

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	

11	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19544 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears this crossing might be been recently modified O&M manual calls for 8 inch pipe not 14 inch pipe, need additional information--exposed section of pipe is protected with white paint. Need to contact owner to obtain records. Recommend clearing vegetation along the pipe alignment. FIELD_STRUCT_DESC: 14-inch siphon through the levee approximately 3.2 feet below the crown. The existing 8-inch pipe listed in the O&M manual is no longer present at LM 0.1 (USACE-1959), no permit was found authorizing crossing modifications. FS Date: 05/14/2013	38.120708 ° -121.682798 °	38.120708 ° -121.682798 °	13
----	------	------	--------------	-------------------------	----	---------	---	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_13

12	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19518 EP_NO: 11227 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Siphon primer on waterward shoulder. 36-inch steel pipe with shut-off valve inside at landward toe ditch. (ABO No. 11227-1975) FS Date: 05/14/2013	38.120707 ° -121.682698 °	38.120707 ° -121.682698 °	14
----	------	------	--------------	-------------------------	----	---------	--	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_14

13	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19523 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 14-inch siphon through the levee approximately 3.2 feet below the crown. The existing 8-inch pipe listed in the O&M manual is no longer present at LM 0.1 (USACE-1959), no permit was found authorizing crossing modifications. FS Date: 05/14/2013	38.120699 ° -121.682700 °	38.120699 ° -121.682700 °	15
----	------	------	--------------	-------------------------	----	---------	---	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_15

14	0.11	0.11	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19527 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 14-inch siphon through the levee approximately 3.2 feet below the crown. The existing 8-inch pipe listed in the O&M manual is no longer present at LM 0.1 (USACE-1959), no permit was found authorizing crossing modifications. FS Date: 05/14/2013	38.120708 ° -121.682798 °	38.120708 ° -121.682798 °	16
----	------	------	--------------	-------------------------	----	---------	---	------------------------------	------------------------------	----

DWR ID: DWR_RD1601_01_f_2013_16

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
15	0.17	0.17	Earthen Levee	Erosion / Bank Caving	CR	A Ma	E1 : Note and monitor erosion site. Inspector Comments: District repaired site.	38.119832 ° -121.682762 °	38.119832 ° -121.682762 °	4 Y
DWR ID: DWR_RD1601_01_s_2013_4										
16	0.18	0.18	Earthen Levee	Erosion / Bank Caving	CR	M Ma	E1 : Note and monitor erosion site. Inspector Comments: District repaired site.	38.119698 ° -121.682760 °	38.119698 ° -121.682760 °	3 Y
DWR ID: DWR_RD1601_01_s_2013_3										
17	0.80	0.80	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19510 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: no markers or signs available--will need to coordinate with owner to determine if crossing is still being used or abandoned. FIELD_STRUCT_DESC: 12-inch steel gas line through the levee. Facility on landward side. FS Date: 05/14/2013	38.111078 ° -121.682011 °	38.111078 ° -121.682011 °	17
DWR ID: DWR_RD1601_01_f_2013_17										
18	2.08	2.08	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19524 EP_NO: 2909A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 8-inch siphon pipe through levee, 2.4 feet below crown. Cutoff wall around pipe at center of levee. Siphon breaker on apex of pipe on landward shoulder. Hand primer pump on landward slope. (Permit No. 2909A-1960) FS Date: 05/14/2013	38.093107 ° -121.684525 °	38.093107 ° -121.684525 °	18 Y
DWR ID: DWR_RD1601_01_f_2013_18										
19	2.08	2.08	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19515 EP_NO: 2909A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 8-inch siphon pipe through levee, 2.4 feet below crown. Cutoff wall around pipe at center of levee. Siphon breaker on apex of pipe on landward shoulder. Hand primer pump on landward slope. (Permit No. 2909A-1960) FS Date: 05/14/2013	38.093107 ° -121.684525 °	38.093107 ° -121.684525 °	19
DWR ID: DWR_RD1601_01_f_2013_19										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	

20	2.08	2.08	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19513 EP_NO: 2909A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 8-inch siphon pipe through levee, 2.4 feet below crown. Cutoff wall around pipe at center of levee. Siphon breaker on apex of pipe on landward shoulder. Hand primer pump on landward slope. (Permit No. 2909A-1960) FS Date: 05/14/2013	38.093107 °	38.093107 °	20
								-121.684525 °	-121.684525 °	

DWR ID: DWR_RD1601_01_f_2013_20

21	2.08	2.08	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19545 EP_NO: 2909A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears this crossing might be been recently modified--exposed section of pipe is protected with white paint. Need to contact owner to obtain records. Recommend clearing vegetation along the pipe alignment. Dense vegetation on landward slope limits the inspector's visibility to identify signs of leaks along levee slope. FIELD_STRUCT_DESC: 8-inch siphon pipe through levee, 2.4 feet below crown. Cutoff wall around pipe at center of levee. Siphon breaker on apex of pipe on landward shoulder. Hand primer pump on landward slope. (Permit No. 2909A-1960) FS Date: 05/14/2013	38.093107 °	38.093107 °	21
								-121.684525 °	-121.684525 °	

DWR ID: DWR_RD1601_01_f_2013_21

22	2.13	2.13	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19514 EP_NO: 6297 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 3-inch electrical conduit through levee, 5.0 feet below the crown. Location marker on waterward slope. Rock revetment on waterward slope. (Permit No. 6297-1969) FS Date: 05/14/2013	38.092427 °	38.092427 °	22
								-121.684595 °	-121.684595 °	

DWR ID: DWR_RD1601_01_f_2013_22

23	2.13	2.13	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19516 EP_NO: 6297 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 3-inch electrical conduit through levee, 5.0 feet below the crown. Location marker on waterward slope. Rock revetment on waterward slope. (Permit No. 6297-1969) FS Date: 05/14/2013	38.092427 °	38.092427 °	23
								-121.684595 °	-121.684595 °	

DWR ID: DWR_RD1601_01_f_2013_23

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
24	2.13	2.13	Supplemental	DWR UCIP Field Study	CR	M En	Inspector Comments: FS_ID:19525 EP_NO: 6297 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 3-inch electrical conduit through levee, 5.0 feet below the crown. Location marker on waterward slope. Rock revetment on waterward slope. (Permit No. 6297-1969) FS Date: 05/14/2013	38.092427 ° -121.684595 °	38.092427 ° -121.684595 °	24 Y

DWR ID: DWR_RD1601_01_f_2013_24

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

Levee Mile Report Line	4
Start Levee Mile	0.10
End Levee Mile	2.47
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting
Looking north at holes on levee crown.	
richard_f_20130911_209.jpg	



Levee Mile Report Line	4
Start Levee Mile	0.10
End Levee Mile	2.47
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting
Looking south at crown surface rutting.	
richard_f_20130911_210.jpg	



Levee Mile Report Line	4
Start Levee Mile	0.10
End Levee Mile	2.47
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting
Looking southwest at re-grade crown roadway.	
richard_f_20130911_211.JPG	



* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	Ob : Design & System Obsolescence
CR : Crown	N : Not Inspected/Rated	En : Enforcement
	C : Corrected	
	A/W : Acceptable but Monitor & Maintain	
	U : Unacceptable	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

Levee Mile Report Line	6
Start Levee Mile	0.11
End Levee Mile	0.11
Location	Crown
Category	Supplemental
Item	DWR UCIP Field Study
View of pipes located on landward side-dense vegetation along slope.	
UCIP_11816.jpg	



Levee Mile Report Line	15
Start Levee Mile	0.17
End Levee Mile	0.17
Location	Crown
Category	Earthen Levee
Item	Erosion / Bank Caving
Looking south at erosion on waterside toe.	
richard_f_20130911_208.JPG	



Levee Mile Report Line	15
Start Levee Mile	0.17
End Levee Mile	0.17
Location	Crown
Category	Earthen Levee
Item	Erosion / Bank Caving
Looking south at repaired erosion site on waterward slope.	
richard_f_20130913_214.JPG	

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

Levee Mile Report Line	16
Start Levee Mile	0.18
End Levee Mile	0.18
Location	Crown
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking northwest at eroision on waterside toe.

richard_f_20130911_207.JPG



Levee Mile Report Line	16
Start Levee Mile	0.18
End Levee Mile	0.18
Location	Crown
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southwest at repaired site on waterward slope

richard_f_20130913_213.JPG



Levee Mile Report Line	16
Start Levee Mile	0.18
End Levee Mile	0.18
Location	Crown
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking northwest at repaired erosion site on waterward slope.

richard_f_20130913_215.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 1601 Twitchell

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Threemile Slough	Left	2.47	09/12/2013 09/12/2013	Richard Willoughby

Levee Mile Report Line	18
Start Levee Mile	2.08
End Levee Mile	2.08
Location	Crown
Category	Supplemental
Item	DWR UCIP Field Study

View of crossing on waterward slope. Rip rap present at waterward toe.

UCIP_11804.jpg



Levee Mile Report Line	24
Start Levee Mile	2.13
End Levee Mile	2.13
Location	Crown
Category	Supplemental
Item	DWR UCIP Field Study

Sign present on waterward side.

UCIP_11809.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement